

**REBUTTAL TESTIMONY OF
JOHN H. RAFTERY
ON BEHALF OF
SOUTH CAROLINA ELECTRIC & GAS COMPANY
DOCKET NO. 2019-2-E**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is John Raftery. My business address is 220 Operation Way, Cayce,
3 South Carolina.

4
5 **Q. ARE YOU THE SAME JOHN RAFTERY WHO HAS PREVIOUSLY FILED**
6 **TESTIMONY IN THIS DOCKET?**

7 A. Yes. Subsequent to filing my direct testimony, I was assigned to the position
8 of Director of Rates & Regulatory Affairs for South Carolina.

9
10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 A. The purpose of my rebuttal testimony is to discuss the response of South
12 Carolina Electric & Gas Company (“SCE&G” or the “Company”) to the direct
13 testimony of Mr. Tyler Norris filed on behalf of the South Carolina Solar Business
14 Alliance, LLC (“SCSBA”). Specifically, I respond to Mr. Norris’ testimony
15 regarding SCE&G’s proposed monthly charge (“Variable Integration Charge”) to
16 recover the Company’s variable integration costs from solar qualifying facilities

1 (“QFs”) pursuant to the terms of their executed power purchase agreements
2 (“PPAs”) with SCE&G.
3

4 **Q. AS AN INITIAL MATTER, CAN YOU EXPLAIN WHY SCE&G**
5 **PROPOSED ITS VARIABLE INTEGRATION CHARGE AS PART OF THIS**
6 **PROCEEDING?**

7 A. Yes. Section 58-27-865(A)(2) of the South Carolina Code of Laws and prior
8 orders of the Commission require a review of SCE&G’s avoided cost as part of the
9 annual review of the Company’s fuel costs. In connection with these proceedings,
10 the Company updates its avoided cost calculations so as to properly reflect the
11 incremental costs of energy and capacity it is able to avoid as a result of power
12 purchases from QFs under the Public Utilities Regulatory Policies Act of 1978
13 (“PURPA”). In addition, SCE&G included in Rate PR-2 the Variable Integration
14 Charge in order to recover from QFs the variable integration costs that result from
15 the power the QFs generate. Importantly, the Commission previously found that any
16 adjustments to Rate PR-2 “should be considered as part of the Company’s annual
17 fuel proceeding.” Order No. 2016-297 at p. 25.

18 In addition, however, these variable integration costs, and the resulting
19 Variable Integration Charge, are properly included in Rate PR-2 as they are a factor
20 in determining the incremental costs that can be avoided as a result of the QF
21 purchases. Specifically, the intermittent nature of solar generation supplied to
22 SCE&G’s system results in variable integration costs to the Company as a result of

1 its need to maintain additional reserves and make operational adjustments. SCE&G
2 would not otherwise incur these costs but for the purchases from these facilities thus
3 making them a component of avoided costs. It therefore is appropriate to account
4 for these variable integration costs, and the resulting Variable Integration Charge,
5 when calculating SCE&G's avoided costs.
6

7 **Q. ON PAGE 4, LINES 5 THROUGH 11, PAGE 18, LINE 14 THROUGH PAGE**
8 **20, LINE 10, AND PAGE 22, LINE 1 THROUGH PAGE 25, LINE 8, MR.**
9 **NORRIS SUGGESTS THAT IT IS NOT APPROPRIATE TO CONSIDER**
10 **THE VARIABLE INTEGRATION CHARGE IN THIS DOCKET BECAUSE**
11 **OF PENDING LEGISLATION. DO YOU AGREE?**

12 A. No, I do not. Mr. Norris suggests that a decision on SCE&G's proposed
13 Variable Integration Charge may be affected by House Bill 3659 ("H. 3659"),
14 which currently is under consideration in the South Carolina General Assembly.
15 Although H. 3659, if enacted in its current form, would require the Commission to
16 establish a new docket, separate from annual fuel cost proceedings, to consider
17 avoided cost rates and methodologies, it is not certain that this legislation will be
18 approved by both legislative bodies, signed by the Governor, and enacted into law.
19 Additionally, it is possible that, prior to its enactment, the legislation may be
20 amended.

21 Even if H. 3659 becomes law by the end of this legislative session, however,
22 that possibility does not provide a reasonable basis to delay the recognition of

1 SCE&G's variable integration costs and the approval of its proposed Variable
2 Integration Charge. As discussed in my direct testimony, for over 700 MW of the
3 approximately 1,048 MW of solar generation with an executed PPA, the PPA
4 provides that the solar owner/developer ("Seller") is responsible for the variable
5 integration costs. Delaying consideration of the Variable Integration Charge
6 therefore would allow the Sellers to avoid having to pay for these costs for which
7 they are legally obligated. Instead, these costs would be directly shifted onto and
8 borne by SCE&G's customers, which the Company believes is unreasonable and
9 contrary to the intent and plain language of PURPA and its implementing
10 regulations.

11
12 **Q. ON PAGE 4, LINES 11 THROUGH 16 AND ON PAGE 20, LINE 11**
13 **THROUGH PAGE 21, LINE 14, MR. NORRIS ALSO STATES IT IS**
14 **INAPPROPRIATE TO CONSIDER THE VARIABLE INTEGRATION**
15 **CHARGE IN THIS DOCKET BECAUSE OF THE SETTLEMENT**
16 **AGREEMENT IN DOCKET NO. 2017-370-E. DO YOU AGREE?**

17 A. No. As reflected by the plain language of the referenced Settlement
18 Agreement, Dominion Energy, Inc. ("Dominion Energy"), SCE&G, and SCSBA
19 agreed to take certain action with respect to the pricing of energy "storage as a
20 separate resource" or "for dispatchable renewable generating facilities such as solar
21 + storage." That SCE&G will later develop a rate for "storage as a separate
22 resource" or for "solar + storage" in no way obviates the need for SCE&G to

1 update, as part of this proceeding, its Rate PR-2, which is applicable to non-
2 dispatchable solar QFs that do not have storage capability. The “curtailment
3 protocols” and “other proposed policies” referenced by Mr. Norris also are wholly
4 irrelevant to a determination of SCE&G’s current avoided cost and the appropriate
5 related pricing for non-dispatchable solar QF energy in this proceeding. It therefore
6 would be unreasonable to delay updates to the avoided costs reflected in Rate PR-
7 2 pending the proposal of an unrelated pricing structure that does not affect the
8 non-dispatchable QF facilities and contractual issues that do not pertain to the
9 current avoided costs. Such a delay instead would only serve to unreasonably and
10 unlawfully expose SCE&G’s retail customers to excessive avoided costs in the
11 interim.

12
13 **Q. WHAT IS YOUR RESPONSE TO MR. NORRIS’ SUGGESTION ON PAGE**
14 **4, LINE 20 THROUGH PAGE 5 LINE 8 THAT THE COMMISSION**
15 **SHOULD DELAY A DETERMINATION ON THE VARIABLE**
16 **INTEGRATION CHARGE UNTIL AFTER THE SCE&G ENERGY**
17 **EFFICIENCY ADVISORY GROUP PRESENTS ITS RESULTS?**

18 A. As with the issues regarding H. 3659, I do not believe delaying consideration
19 of SCE&G’s proposed Variable Integration Charge until after the Energy
20 Efficiency Advisory Group presents its results is appropriate. Any
21 recommendations presented by the Group would be subject to Commission
22 approval and delaying approval of the Variable Integration Charge until after the

1 Group presents its results and the regulatory process is concluded would allow the
2 Sellers to avoid their contractual responsibility for variable integration costs for an
3 indeterminant period of time. As a result, SCE&G's customers would bear the
4 burden of paying for these costs for some indefinite period into the future.

5
6 **Q. HOW DO YOU RESPOND TO MR. NORRIS' TESTIMONY ON PAGE 5,**
7 **LINE 9 THROUGH PAGE 6, LINE 5 THAT SCE&G'S ASSUMPTION ON**
8 **FUTURE SOLAR INSTALLATIONS IS UNREALISTIC?**

9 A. It appears that Mr. Norris is suggesting SCE&G should engage in speculation
10 as to which solar projects may be abandoned and not become operational in order
11 to calculate its Variable Integration Charge. On its face, this is unreasonable.
12 Approximately 1,048 MW of solar generation have executed PPAs with SCE&G.
13 These contracts express the Sellers' intent to design, construct, interconnect, and
14 operate solar generating facilities that will sell power to the Company under
15 PURPA often within 24 months of the effective date of the PPA. SCE&G has no
16 basis upon which it could assume that they would fail to follow through with their
17 proposed projects. In fact, these PPAs require the Sellers to post development credit
18 support in order to provide assurance to the Company that the energy and capacity
19 will materialize as it develops its IRPs.

20 Also, as I discuss in my direct testimony, the Sellers for 700 MW of solar
21 generation have PPAs in which they have contractually agreed to pay a Variable
22 Integration Charge. It therefore is reasonable for SCE&G to estimate its future

1 avoided costs and variable incremental costs based upon the expressed intent of the
2 Sellers and their agreement to be responsible for the Variable Integration Charges.
3 For SCE&G to base its avoided costs and Variable Integration Charges assuming
4 some portion of the solar generation will not be constructed would require SCE&G
5 to engage in speculation, rather than base its estimates upon reasonably known
6 facts.

7
8 **Q. ON PAGE 6, LINES 6 THROUGH 20, MR. NORRIS STATES THAT**
9 **OTHER UTILITIES HAVE NOT SOUGHT TO IMPOSE VARIABLE**
10 **INTEGRATION COSTS ON EXISTING FACILITIES. HE ALSO**
11 **SUGGESTS ON PAGE 12, LINE 7 THROUGH PAGE 15, LINE 15 THAT**
12 **SCE&G's AVOIDED COSTS ARE LOW COMPARED TO OTHER**
13 **UTILITIES. HOW DO YOU RESPOND?**

14 **A.** I am not aware of how other electric utilities specifically address variable
15 integration costs. However, I would note that Mr. Norris does not provide any
16 comparison regarding system operating characteristics, low load operations,
17 generation diversity, or other pertinent operational information that would be
18 needed to determine if an avoided cost of one utility is comparable to another. I
19 therefore do not believe that comparing SCE&G's proposed avoided cost and
20 Variable Integration Charge to other utilities without any reasonable basis for such
21 a comparison is reasonable or adequate for the purposes of determining the
22 appropriate avoided costs and Variable Integration Charge for the Company.

1 I also would note that Mr. Norris' Figure 2 on page 14 of his testimony and
2 his comparison of SCE&G's solar penetration to that of Duke Energy Progress,
3 LLC is inaccurate. As shown in his Figure 2, Mr. Norris states that he used
4 SCE&G's "Solar Case 1" to project the Company will have 637 MW of solar
5 interconnected with its system in 2020. As discussed by Dr. Tanner and as shown
6 on Table 1 of his direct testimony, however, Solar Case 1 reflects the amount of
7 solar generation—637 MW—expected to be online and interconnected with the
8 Company's system by the end of 2019. By the end of 2020 and as shown in Dr.
9 Tanner's Solar Case 2, however, SCE&G projects that approximately 1,050 MW
10 of utility scale solar will be interconnected with its system. Updating Mr. Norris'
11 Figure 2 to correct for this error would increase SCE&G's solar penetration
12 percentage to approximately 20% of its peak load, which is comparable to the
13 percentage shown in his Figure 2 for DEP.

14 In addition, Mr. Norris' discussion of the solar penetration percentages of
15 SCE&G to DEP is not an apples-to-apples comparison. SCE&G does not have a
16 Joint Dispatch Agreement like DEP and Duke Energy Carolinas, LLC ("DEC")
17 which allows the companies to move power from one area to the other on a
18 dynamically scheduled basis. When viewed this way, the projected 4,649 MW of
19 combined solar penetration for DEC and DEP (1,588 MW and 3,061 MW,
20 respectively) is approximately 14% of their projected 32,219 MW combined winter
21 peak load in 2020, which is just around two-thirds of the 20% SCE&G anticipates.

1 In fact, it isn't until a full four years later in 2024 that Duke is projected to catch-
2 up to SCE&G in terms of solar percentages.

3 Moreover, Mr. Norris seems to be suggesting that Sellers, which are private,
4 for-profit business entities, should not be required to abide by the terms and
5 conditions of the PPAs which include variable integration cost recovery they
6 voluntarily executed and are legally bound by. Instead, he seems to suggest that
7 SCE&G's customers should be required to bear these costs simply because other
8 utilities may not currently recover variable integration costs from solar QFs. I do
9 not believe this is reasonable, legally appropriate, or in accordance with PURPA
10 requirements and general ratemaking principles.

11
12 **Q. HOW DO YOU RESPOND TO MR. NORRIS' TESTIMONY ON PAGE 7,**
13 **LINE 1 THROUGH PAGE 10, LINE 2 REGARDING THE IMPACT THE**
14 **VARIABLE INTEGRATION CHARGE MAY HAVE ON SOLAR QFs AND**
15 **THE BUSINESS ENVIRONMENT?**

16 A. I first would respond by noting his testimony regarding this subject does not
17 appear to be based on any facts, but mere conjecture. Again, however, each of the
18 solar projects that would be impacted by the Variable Integration Charge
19 presumably are sophisticated for-profit business entities that were well aware of
20 the terms and conditions set forth in their PPAs, including their agreement to be
21 responsible for these costs, at the time they executed their contracts. It therefore
22 seems logical that, in planning for their projects and forecasting their viability and

1 potential revenues, these facilities took into consideration the impact a future
2 Variable Integration Charge would have on their financial condition.

3 Regardless, PURPA does not require an electric utility to pay QFs excessive
4 avoided costs so that developers and investors can achieve sufficient revenues to
5 make their projects viable. Instead, PURPA is intended to make ratepayers
6 economically indifferent between utility power plant additions and utility
7 purchases of QF power. In fact, PURPA's implementing regulations expressly
8 provide that "[n]othing ... requires any electric utility to pay more than the avoided
9 costs for purchases" from QFs. 18 C.F.R. §292.304(a)(2). Requiring SCE&G to
10 pay QFs more than its avoided costs, without accounting for the Company's
11 variable integration costs associated with solar generation, would mean that the
12 Company's customers would be paying more for solar QF power than is legally
13 required. Thus, customers would be unnecessarily and unreasonably subjected to
14 higher rates and effectively would be unlawfully and unreasonably subsidizing
15 these privately held solar projects.

16 I also would note that such an outcome would appear to be at odds with the
17 requirements set forth in the existing version H. 3659, Section 58-41-20(A), which
18 provides that "[a]ny decisions by the commission [establishing avoided costs] shall
19 support the public interest of the using and consuming public and strive to reduce
20 the risk placed on the using and consuming public." Similarly, the current version
21 of Section 58-41-20(A)(3) in H. 3659 provides that avoided cost rates and
22 methodologies "must be in the best interests of all customers and consistent with

1 PURPA” and the Federal Energy Regulatory Commission's implementing
2 regulations, which require such rates to be just and reasonable to the ratepayers of
3 the electrical utility, in the public interest, and nondiscriminatory to” QFs.

4 Finally, I would point out that, as part of the Settlement Agreement, SCSBA
5 agreed to incorporate the following language regarding Variable Integration
6 Charges in new QF PPAs:

7 Seller shall be responsible for all Variable Integration Charges
8 assessed against Seller, and, as approved by the Commission,
9 all Variable Integration Costs assessed against Buyer. To the
10 extent any Variable Integration Costs are incurred by Buyer,
11 and Seller is deemed responsible for such costs by the
12 Commission, Seller shall promptly reimburse Buyer for such
13 Variable Integration Costs.

14 Based on this language, SCSBA has recognized that it is appropriate for solar QFs
15 to be responsible for variable integration costs pursuant to the terms of their PPAs.
16 To now claim that assessing the Variable Integration Charge against the Sellers
17 will “have direct and severe commercial consequences for independent power
18 producers, up to and including a complete halt to independent solar development
19 in SCE&G’s territory” seems disingenuous at best.
20
21

1 **Q. ON PAGE 10, LINE 3 THROUGH PAGE 11, LINE 3, MR. NORRIS**
2 **DISCUSSES THE IMPACT OF SCE&G'S AVOIDED COSTS AND THE**
3 **VARIABLE INTEGRATION CHARGE ON RENEWABLE ENERGY**
4 **PROGRAMS. HOW DO YOU RESPOND?**

5 **A.** I simply would point out that requiring payments to QFs in excess of the
6 Company's avoided costs would result in customers paying unlawful and
7 unreasonably high rates, which also would negatively impact SCE&G's
8 commercial and industrial customers.

9
10 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 **A.** Yes.